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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--------------------------------------|-----------------|----------------------|---------------------|------------------|--|
| 10/784,058 | 02/20/2004 | Chung-Wen Ko | 250122-1240 6848 | | |
| 24504 | 7590 05/18/2005 | EXAMINER | | | |
| • | CAYDEN, HORSTEM | LIE, ANO | LIE, ANGELA M | | |
| 100 GALLERIA PARKWAY, NW STE 1750 | | | ART UNIT | PAPER NUMBER | |
| ATLANTA, (| GA 30339-5948 | 2821 | | | |

DATE MAILED: 05/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | | | AL. | | | |
|---|--|---|---|--|--------------|--|--|--|
| | | Application | No. | Applicant(s) | | | | |
| Office Action Summary | | 10/784,058 | | KO, CHUNG-WEN | | | | |
| | | Examiner | | Art Unit | | | | |
| | | Angela M. L | ie | 2821 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | | | |
| A SHO THE M - Extensi after SI - If the p - If NO p - Failure Any rep | RTENED STATUTORY PERIOD FOR REPLY AILING DATE OF THIS COMMUNICATION. ions of time may be available under the provisions of 37 CFR 1.13 (X (6) MONTHS from the mailing date of this communication. eriod for reply specified above is less than thirty (30) days, a reply eriod for reply is specified above, the maximum statutory period w to reply within the set or extended period for reply will, by statute, ply received by the Office later than three months after the mailing patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event within the statuto vill apply and will of cause the applica | , however, may a reply be time ry minimum of thirty (30) days expire SIX (6) MONTHS from the ation to become ABANDONED | ely filed will be considered timely the mailing date of this co (35 U.S.C. § 133). | | | | |
| Status | | | | | | | | |
| 1)⊠ F | Responsive to communication(s) filed on <u>20 Fe</u> | ebruary 2004 | | | | | | |
| 2a) <u> </u> | This action is FINAL . 2b)⊠ This action is non-final. | | | | | | | |
| • - | | | | | | | | |
| C | closed in accordance with the practice under E | x parte Qua | /le, 1935 C.D. 11, 45 | 3 O.G. 213. | | | | |
| Dispositio | n of Claims | | | | | | | |
| 4: 5)□ (6)⊠ (7)□ (| Claim(s) <u>1-8</u> is/are pending in the application. a) Of the above claim(s) is/are withdray Claim(s) is/are allowed. Claim(s) <u>1-8</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or | | | | | | | |
| Applicatio | n Papers | | | | | | | |
| 10)⊠ T | he specification is objected to by the Examine he drawing(s) filed on 20 February 2004 is/are applicant may not request that any objection to the Replacement drawing sheet(s) including the correct he oath or declaration is objected to by the Ex | e: a)⊠ acce drawing(s) be tion is required | held in abeyance. See if the drawing(s) is obje | 37 CFR 1.85(a). ected to. See 37 CF | FR 1.121(d). | | | |
| Priority un | nder 35 U.S.C. § 119 | | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | | | |
| Attacher : "" | -1 | | | | | | | |
| 2) Notice 3) Information | of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948) ation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) No(s)/Mail Date 2/20/2004, 03/28/2005 | | Interview Summary (Paper No(s)/Mail Dai Notice of Informal Pa | |)-152) | | | |

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DETAILED ACTION

Claim Rejections - 35 USC § 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 1-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over May (US 6211613) in the view of Van Order (US 6247820).

As to claim 1, May teaches an electroluminescent display comprising: a transparent display panel (Figure 1, elements 12,4 and 2), a reflective sheet (Figure 1, element 10). May does not disclose a brightness regulating film for light transmission between the transparent display panel and the reflective sheet. Van Order teaches electro-optic medium placed between two electrodes (Figure 2, elements 19, 15 and 17), where it is used to change light transmissivity (column 3, lines 26-29 and lines 46-48). It would have been obvious to one of the ordinary skill in the art during the time when the invention was made to incorporate electro-optic medium placed between two electrodes, as taught by Van Order into May's organic electroluminescent display, because this allows to keep a high contrast of displayed image regardless of ambient light intensity.

As to claim 2, May and Van Order teach all the limitations presented in claim 1.

May also teaches the display wherein the transparent display panel comprises: a transparent substrate (Figure 1, element 12), a first transparent electrode over the

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transparent substrate (Figure 1, element 4), a light emitting layer over the first transparent electrode (column 6, lines 22-26), a second transparent electrode over the light emitting layer (Figure 1, element 2).

As to claim 3, May teaches the display wherein the light-emitting layer is an organic electroluminescent film (column 6, lines 21-26).

As to claim 4, Van Order teaches the display wherein the brightness regulating film is an optical slit (Figure 2, element 15) to control light transmission from the environment (column 3, lines 46-48).

As to claim 5, Van Order teaches the display wherein the brightness regulating film is made of electrochromic material (column 7, lines 39-40) or liquid crystal (column 7, lines 41-43) capable for controlling light transmission thereon by adjusting current applied thereto (column 3, lines 44-48, Van Order teach using a control voltage to control transmission of the medium, however current and voltage are related, therefore controlling voltage also leads to controlling current).

As to claim 6, Van Order teaches the display further comprising a photo sensor (column 3, lines 48-49) to detect light intensity of the environment (column 1, lines 43-44).

As to claim 7, Van Order teaches the display wherein the brightness regulating film adjusts the light transmission intensity from the environment according to a light intensity of the environment detected by the photo sensor (column 1, lines 41-44).

As to claim 8, Van Order teaches the display wherein the brightness regulating film (Figure 2, element 15) adjusts a light-transmitting mode thereof by controlling

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current intensity applied thereon (column 3, lines 46-48, since voltage and current are related, controlling voltage leads also to controlling current) according to a light intensity of the environment as detected by the photo sensor (column 1, lines 43-44).

The Prior Art

- 3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
 - US 6239898 discloses the electrochromic structure
 - US 20040262614 discloses bistable display having a photodetector
 - US 20040031966 discloses the organic photnic integrated circuit using a photodetector and a transparent organic light emitting device.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela M. Lie whose telephone number is 571-272-8445. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PL

Supervisory Patent Examiner Technology Center 2800